

REMARKS

Claims 1 and 3-5 stand rejected under 35 U.S.C. §103 as being unpatentable over United States Patent No. 6,463,974 to Hellweg et al. in view of United States Patent No. 2,384,402 to Schubert et al. Applicant respectfully traverses this rejection.

Applicant respectfully submits that the proposed combination fails to include all of the features defined in independent Claim 1. More specifically, the proposed combination fails to include an annular shell in which, *inter alia*, “a ratio W_n/W_s of a length W_n (mm) of the respective notches in a direction orthogonal to the circumferential direction to the width W_s (mm) of the respective bent ends is set to be greater than or equal to 0.3 but less than 1.0,” as now defined in amended independent Claim 1. Applicant’s Figure 2 shows an example of an embodiment in which the widths W_n and W_s are depicted. As readily understood from the drawing, the claimed upper limit of W_n/W_s of “less than 1.0” means that the notches 8 terminate prior to reaching the full width W_s of the bend end 7.

Such a configuration enhances the durability of the run-flat support member, while simultaneously enhancing the formability of the member, by reducing/eliminating the occurrence of wrinkles and cracks. Paragraph [0006] of the present Specification discloses how simultaneous achievement of these two goals is a problem. On the other hand, in a configuration of the present invention in which the ratio

Wn/Ws is 1.0 or greater, the durability of the support member is greatly reduced, and formability is improved by the mere presence of the notches.

In the Office Action, the Examiner correctly acknowledged that the Hellweg et al. reference fails to disclose the claimed notches in the bent edges of the annular shell. *See* November 17, 2009 Final Office Action, page 2, paragraph 2, lines 6-7 lines 20-21. Accordingly, the Examiner relied upon the Schubert et al. reference for this feature. *See* November 17, 2009 Final Office Action, page 2, paragraph 2, lines 9-12.

In response, Applicant respectfully submits that even assuming *arguendo* that one of ordinary skill in the art would have modified the device of the Hellweg et al. reference in the manner suggested by the Examiner, the resulting product would still lack the claimed configuration in which the “ratio Wn/Ws . . . is set to be greater than or equal to 0.3 but less than 1.0,” as now defined in independent Claim 1. In fact, the Schubert et al. reference teaches away from such a configuration by teaching a configuration in which, as shown in Figures I and III of Schubert et al., the notches 12 reach all the way to and/or past the width of the bend end 13 (which would make the ratio of Wn/Ws to be greater than or equal to 1). More specifically, the Schubert et al. reference teaches away from such embodiments by stating that the notches extend “at least to the inside of the bend line [11, of Figures I and III]” (col. 2, lines 16-17) and that the notches extend “through the flange area as a minimum” (col. 2, lines 30-31).

As a reminder, the Federal Circuit has defined “teaching away” in the following manner: “A reference may be said to teach away when a person of ordinary

skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be lead in a direction divergent from the path that was taken by the applicant...[or] if it suggests that the line of development flowing from the reference's disclosure is unlikely to be productive of the result sought by the applicant.” (Emphasis added). Tec Air, Inc. v. Denso Manuf. Michigan, Inc., 192 F.3d 1353, 1360 (Fed. Cir. 1999) *quoting In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994).

Accordingly, in light of this definition, Applicant respectfully submits that the Schubert et al. reference teaches away from a configuration in which the “ratio W_n/W_s . . . is . . . less than 1.0,” as now defined in independent Claim 1, because one of ordinary skill in the art, upon considering Shubert et al., would have instead been lead in the divergent direction to a configuration in which the ratio W_n/W_s is 1.0 or greater, assuming *arguendo* that one would have been motivated to combine Schubert et al. with Hellweg et al. in the first place.

Thus, for at least the reasons set forth above, Applicant respectfully requests the withdrawal of this §103 rejection of independent Claim 1 and associated dependent Claims 3-5.

Finally, Applicant has added new independent Claim 6 and associated dependent Claims 7-9. New independent Claim 6 is similar to independent Claim 1, except that it defines the configuration of the notches with language referring to the notches terminating well before reaching the associated radius of curvature portion. Applicant's Figure 2 shows an example of the radius of curvature portion defined near


radius R, and it also shows how the notches 8 terminate before reaching area R. For similar reasons to those discussed above with regard to the §103 rejection, Applicant respectfully submits that new independent Claim 6 and associated dependent Claims 7-9 are also allowable over the art of record.

For all of the above reasons, Applicant requests reconsideration and allowance of the claimed invention. Should the Examiner be of the opinion that a telephone conference would aid in the prosecution of the application, or that outstanding issues exist, the Examiner is invited to contact the undersigned attorney.

If a Petition under 37 C.F.R. §1.136(a) for an extension of time for response is required to make the attached response timely, it is hereby petitioned under 37 C.F.R. §1.136(a) for an extension of time for response in the above-identified application for the period required to make the attached response timely. The Commissioner is hereby authorized to charge any additional fees which may be required to this Application under 37 C.F.R. §§1.16-1.17, or credit any overpayment, to Deposit Account No. 07-2069.

Respectfully submitted,

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